

Evaluation of positive tuberculosis smear cases in sputum samples of patients with chronic cough in 2018 and 2017 years in Ardabil province

Abstract

Background and objective: Almost one-third of the world's population (2 billion people) are infected with TB and are at the risk of tuberculosis. Each year about 9 million people develop active TB and 1.5 to 2 million people will die. Obviously, for the exact conclusion of a test, the sample should be collected in the correct way. Obviously, failure to properly process each stage of sampling sputum from the patient can be a waste of time and cost, and consequently a lack of diagnosis of a person's illness. The aim of this study is to determine the number of cases of positive smear in sputum samples taken in patients with chronic cough in the country's protocol for the care of patients over the past 2 years in Ardabil province.

Methods: In this retrospective study that was performed on the results of sputum test in patients with chronic cough. samples from health centers, hospitals, and physicians' offices were assessed by the provincial health center in terms of the positive and demographic characteristics and the sampling efficiency was assessed by the different centers for the positivity of the test.

Results: Out of 6834 samples sent from health centers, 34 samples (0.5%) were positive and out of 2391 samples sent from hospitals, 37 samples (1.3%) were positive, and from 431 Bronchoalveolar lavage samples which all were sent from hospitals, six samples (1.4%) were positive. Totally 71 samples (0.7%) were positive and 9585 (99.3%) cases were reported negative. 24.3% of samples sent from health centers and 5.6% of samples sent from hospitals, did not have a good quality.

Conclusion: At the end of the study, there was a significant relationship between the number of positive samples in the two groups of samples sent from health centers and hospitals, so that the samples sent from the hospital were more positive. There was a significant relationship between the quality of samples in two groups of samples sent from health centers and hospitals, which was superior to the hospital.

Keywords: Sputum smear, Tuberculosis sputum sample, National protocol for the care of tuberculosis patients, Ardebil.